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#### Box 5

### RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE FOURTH QUARTER OF 2008

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2008. The survey was conducted between 15 and 17 October 2008. The SPF gathers information on expectations for euro area inflation, GDP growth and unemployment from experts affiliated with financial or non-financial institutions based in the EU. Given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.

### Inflation expectations for 2008, 2009 and 2010

SPF participants' inflation expectations for 2008, 2009 and 2010 have all been revised downwards since the previous round (conducted in July), and now stand at 3.4%, 2.2% and 2.0% respectively. The downward revision was largest for 2009, at 0.4 percentage point (see the table). The respondents attributed their downward revisions mainly to (oil and food) commodity price developments, as well as to weaker demand. By contrast, many mentioned exchange rates as an upward factor. Labour costs (in particular when adjusted for productivity growth, i.e. unit labour costs) were also cited as an upward factor.

1 Additional data are available on the ECB's website at www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html

The SPF inflation expectations for 2008 and 2009 are at the bottom of, or just below, the ranges reported in the September 2008 ECB staff macroeconomic projections for the euro area (finalised in late August 2008). The SPF inflation expectations for 2008-10 are broadly in line with the projections published in the October 2008 issues of Consensus Economics and Euro Zone Barometer (both finalised around the middle of October).

SPF participants were also asked to assess the probability of the future outcome falling within specific intervals. The aggregate probability distribution obtained by averaging the forecasters' responses provides a summary of their assessments. It also provides information about how survey participants gauge, on average, the risk of the actual outcome being above or below the most likely range. Reflecting the lower point estimates, the probability distributions associated with the forecast outcomes were revised down for each of the years in the period 2008-10, with the largest revision being made for 2009 (see Chart A). Nonetheless, for both 2009 and 2010 there remains, at 65% and 54% respectively, a considerable amount of probability associated with outcomes being at or above 2%. Overall, according to the participants' aggregated probability distributions, risks to the forecasts over the next two years are assessed to be broadly balanced. Based on their qualitative responses, participants believe that the main downside risks stem in particular from commodity prices and weak demand, and that upside risks emanate from exchange rate and labour cost developments.

### Indicators of longer-term inflation expectations

Longer-term inflation expectations (for the year 2013) were revised slightly downwards, by 0.04 percentage point, from 2.03% to 1.99%. These point expectations are in line with the latest long-term inflation projections provided by the Euro Zone Barometer (for 2012) and Consensus Economics (for 2013). The disagreement about longer-term inflation expectations (measured as the standard deviation) also decreased slightly.

### Results from the SPF, ECB staff macroeconomic projections, Consensus Economics and Euro Zone Barometer

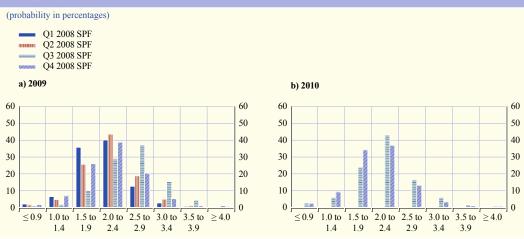
(annual percentage changes, unless otherwise indicated)

	Survey horizon					
HICP inflation	2008	Sep. 2009	2009	Sep. 2010	2010	Longer term 2)
SPF Q4 2008	3.4	1.9	2.2	2.0	2.0	2.0
Previous SPF (Q3 2008)	3.6	-	2.6	-	2.1	2.0
ECB staff macroeconomic projections	3.4-3.6	-	2.3-2.9	-	-	-
Consensus Economics (October 2008)	3.4	-	2.2	-	2.0	2.0
Euro Zone Barometer (October 2008)	3.5	-	2.3	-	2.0	2.0
Real GDP growth	2008	Q2 2009	2009	Q2 2010	2010	Longer term 2)
SPF Q4 2008	1.2	0.1	0.3	1.2	1.4	2.0
Previous SPF (Q3 2008)	1.6	-	1.3	-	1.8	2.1
ECB staff macroeconomic projections	1.1-1.7	-	0.6-1.8	-	-	-
Consensus Economics (October 2008)	1.2	-	0.5	-	1.6	2.0
Euro Zone Barometer (October 2008)	1.2	-	0.3	-	1.6	2.0
Unemployment rate 1)	2008	Aug. 2009	2009	Aug. 2010	2010	Longer term 2)
SPF Q4 2008	7.4	8.1	8.0	8.1	8.1	7.1
Previous SPF (Q3 2008)	7.2	-	7.4	-	7.4	6.9
Consensus Economics (October 2008)	7.4	-	-	-	-	-
Euro Zone Barometer (October 2008)	7.4	-	8.0	-	8.0	7.4

<sup>1)</sup> As a percentage of the labour force

<sup>2)</sup> Longer-term inflation expectations refer to 2013 in the SPF and Consensus Economics and 2012 in the Euro Zone Barometer.





Source: ECB.

1) Corresponds to the average of individual probability distributions provided by SPF forecasters.

Despite the slight fall in average point expectations, the probability of longer-term inflation standing at 2% or above remained unchanged at around 57%, according to survey respondents (see Chart B). These survey results can be compared with the break-even inflation rate, an indicator

of longer-term inflation expectations among market participants calculated as the yield spread between nominal and inflation-linked bonds.<sup>2</sup> Until recently, movements in the probability assigned to an outcome that inflation will stand at 2% or above in the next five years were, on average, broadly in line with developments in a corresponding financial market-based indicator of inflation expectations (the implied one-year forward break-even inflation rate four years ahead, seasonally adjusted) (see Chart B).3 For example, both showed an upward tendency from early 2007 to the middle of 2008. However, since September and the further intensification of financial market turmoil, financial marketbased inflation expectations seem to have fallen sharply, in contrast to survey-based measures. Market-based measures have also been influenced by investors' efforts to reduce risk and leverage and their strong preference for more secure and liquid assets.4

# Chart B Longer-term inflation expectations from surveys and break-even inflation rates

(average annual percentage changes; percentage probability)

- Consensus Economics (for 2013; left-hand scale)
- SPF (for 2013; left-hand scale)
- Euro Zone Barometer (for 2012; left-hand scale)
   implied one-year forward break-even inflation rate four years ahead, seasonally adjusted (left-hand scale)
   probability of longer-term inflation being at or above 2% (right-hand scale)



Sources: Consensus Economics, Euro Zone Barometer, ECB, Reuters and ECB calculations.

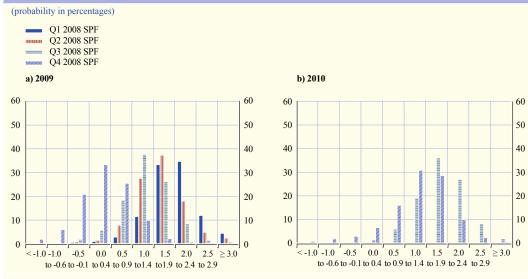
- 2 See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.
- 3 Break-even inflation rates should not be interpreted as direct measures of inflation expectations, since they may also incorporate various risk premia (such as inflation uncertainty and liquidity premia).
- 4 For a further discussion of the impact of the current financial market turmoil on market-based measures of inflation expectations, see the box entitled "Recent increases in real yields and their implications for the analysis of inflation expectations" in this issue of the Monthly Bulletin.

### **Real GDP growth expectations**

Compared with the previous SPF round, expectations for real GDP growth have been revised down sharply for each of the years in the period 2008-10, with the most significant downward revision (of 1.0 percentage point) being for 2009. This represents the largest revision from one round to the next for the "next calendar year forecast" since the start of the SPF in 1999, with almost all of the respondents revising down their GDP growth forecasts for 2009. The main factor behind the weaker outlook is cited as being the current financial market developments and their direct and indirect impact on activity. Respondents expect growth in exports, investment and private consumption to be weaker owing to financial market developments, a deterioration in consumer and business sentiment, the slowdown in the global economy and a worsening in labour market conditions. Factors cited as providing some support for activity are policy interventions by monetary authorities and governments, a weaker euro exchange rate and lower commodity prices.

In line with the downward revision of average point estimates, the probability distributions for expected real GDP growth in 2009 and 2010 have shifted towards lower outcomes than in previous SPF rounds. The progressive deterioration in the outlook for 2009 is clearly illustrated in the left-hand panel of Chart C, which shows the evolution of the associated probability distribution over the latest four rounds. In the first quarter of 2008 the largest probability was associated with an outcome in the range of 2.0%-2.4%. In the latest round, there is a close to zero probability attached to such an outcome, and the greatest probability is associated with an outcome in the range of 0.0%-0.4%. Furthermore, SPF respondents associate a 29% probability with output growth being negative on average in 2009. An additional noteworthy feature is that, despite the significant downward revisions, SPF respondents still report the balance of risks to these forecasts to be on the downside. These downward risks mainly relate to the fact that either some of the factors mentioned above may deteriorate further or their impact may be more severe than anticipated.

Chart C Probability distribution for average annual real GDP growth in 2009 and 2010 in the latest SPF rounds  $^{\rm (l)}$ 



Source: ECB.

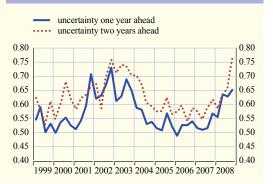
1) Corresponds to the average of individual probability distributions provided by SPF forecasters.

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It is also worth stressing that SPF respondents' uncertainty about the outlook for economic activity is at an elevated level. Aggregate uncertainty (measured as the standard deviation of the aggregate probability distribution) surrounding real GDP forecasts one and two years ahead has strongly increased since the beginning of 2008, and for two-years-ahead forecasts it has exceeded the previous peak reached in the fourth quarter of 2002 (see Chart D).

Growth expectations for 2008 and 2009 in the SPF are at the bottom of, or below, the ranges reported in the September 2008 ECB staff macroeconomic projections for the euro area.

## Chart D Uncertainty surrounding SPF real GDP forecasts ()



Source: ECB.

1) Corresponds to one standard deviation of the aggregate probability distribution.

SPF expectations for real GDP growth in 2009 and 2010 follow broadly the same development as the average of the projections published in the latest issues of the Euro Zone Barometer and Consensus Economics, although at slightly lower levels.

SPF expectations for longer-term real GDP growth (in 2013) are at 2.0%, down 0.1 percentage point from the previous round. Notwithstanding the fact that this represents the lowest longer-term forecast reported thus far by SPF respondents, they also perceive the balance of risks to this outcome as being on the downside.

#### **Expectations for the euro area unemployment rate**

Unemployment rate expectations in the SPF have been revised up for each of the years in the period 2008-10. According to the forecasters, these revisions are mainly due to lower euro area economic growth prospects. A deterioration is envisaged in labour market conditions generally, but particularly in the industry and construction sectors. Most respondents expect the unemployment rate to start levelling off only towards the end of 2009 and to start to decline around the end of 2010. Unemployment rate expectations in the latest SPF round are in line with those of Consensus Economics and the Euro Zone Barometer for the period 2008-10.

Longer-term unemployment rate expectations have also been revised upwards, by 0.2 percentage point, and now stand at 7.1% for 2013. This is somewhat below the Euro Zone Barometer but is based on a larger number of responses. SPF respondents perceive the balance of risks as being on the upside. A number of respondents referred to the need to continue with labour market reforms in order to ensure that the expected pick-up in unemployment in the shorter term does not translate into longer-term unemployment.